

**REMARKS**

Claims 1, 3, 5-12 and 14-24 are all the claims pending in the application. Claim 1 has been amended to incorporate the subject matter of claims 2, 4, and 13, which have been canceled, and based on, for example, Example 1 of the specification. Claim 6 has been amended to properly recite Markush language and claim 21 has been amended to depend from claim 18 instead of claim 17.

Entry of the above amendments is respectfully requested.

**I. Response to Objection to the Specification and Claims**

The disclosure is objected to because, in page 11, lines 34-36 of the specification, it states “[o]f these, aluminum triisopropoxide and aluminum trimethoxide are particularly preferred.” However, there is no prior mention of aluminum triisopropoxide. The specification has been amended, thereby obviating the objection.

Claim 13 is objected to, however, in view of the cancellation of claim 13, the objection is moot.

In view of the above, withdrawal of the objections is respectfully requested.

**II. Response to Rejection of Claims 6 and 21 under 35 U.S.C. § 112, second paragraph**

Claims 6 and 21 are rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite.

With respect to claim 6, the Examiner asserts that improper Markush language is recited. Claim 6 has been amended to recite proper Markush language.

With respect to claim 21, the Examiner asserts that claim 21 recites “...produced through a method as recited in claim 17[,]”; however, claim 17 is a composition claim. Claim 21 has been amended to depend from claim 18 instead of claim 17.

In view of the above, withdrawal of the rejection is respectfully requested.

**III. Response to Rejection of Claims 1-4, 6-15, 17 and 22 under 35 U.S.C. § 102(a)/(e)**

Claims 1-4, 6-15, 17 and 22 are rejected under 35 U.S.C. 102(a)/(e) as being anticipated by Tanaka et al. (US 2003/0181329).

Applicants respectfully traverse the rejection.

Claim 1 is directed to a composition for forming a transparent film, comprising photocatalytic particles; zirconium ammonium carbonate in an amount of 0.1 mass% to 0.75 mass%; a cohydrolysis-polycondensation product of an aluminum alkoxide represented by the formula  $\text{Al}(\text{OR})_3$  where R is an organic group and a titanium alkoxide represented by the formula  $\text{Ti}(\text{OR}')_4$  where R' is an organic group in an amount of 0.1 mass% to 1 mass% as reduced to  $\text{Al}_2\text{O}_3$  and in an amount of 0.01 mass% to 0.1 mass% as reduced to  $\text{TiO}_2$ ; and water, and having a pH of 7 to 9, wherein said composition being able to be cured at 10 to 20°C to form a transparent film.

It is respectfully submitted that Tanaka does not disclose the claimed composition. Specifically, Tanaka does not disclose the specific composition of the present invention, particularly the specific combination of the components and their amounts with the specific pH.

Tanaka discloses many possible components for a binder (*see* [0198]), but does not disclose the specific composition of the present invention.

In addition, Tanaka does not disclose a composition for forming a transparent film by curing at a temperature range of 10 to 20 °C, that is, room temperature or lower, or without heating. In this regard, Tanaka discloses in paragraph [0202] that "[i]f either an organic binder or a partial hydrolysis product of an alkoxysilane produced using a mineral acid is employed as the binder, then application and subsequent curing can be performed at temperature below

30°C. Furthermore, application be performed at a temperature below 30°C , and curing can be performed at a temperature of no more than 200°C.” However, this disclosure relating to curing being performed at temperature below 30°C is only the case where either an organic binder or a partial hydrolysis product of an alkoxysilane produced using a mineral acid is employed as the binder, which is different from the present invention. In the present invention, neither an organic binder nor an alkoxysilane is used.

Thus, Tanaka does not disclose the claimed composition (not containing an organic binder or an alkoxysilane) that can be cured at 10 to 20°C to form a transparent film. The composition which can be cured at 10 to 20°C to form a transparent film is, of course, advantageous since heating is not necessary.

For at least the above reasons, it is respectfully submitted that Tanaka fails to anticipate claim 1, and that claim 1 is patentable over Tanaka.

In addition, claims 3, 6-15, 17 and 22 depend directly or indirectly from claim 1, and thus it is submitted that these claims are patentable for at least the same reasons.

Accordingly, withdrawal of the rejection is respectfully requested.

**IV. Response to Rejection of Claim 4 under 35 U.S.C. § 103(a)**

Claim 4 is alternatively rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Tanaka.

Claim 4 has been canceled, and thus it is respectfully submitted that the rejection is moot. Accordingly, withdrawal of the rejection is respectfully requested.

**V. Response to Rejection of Claims 1-3, 5-17 and 22 under 35 U.S.C. § 103(a)**

Claims 1-3, 5-17 and 22 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Sanbayashi et al. (EP 1 153 999) in view of Koichi et al. (JP 62-036045).

Applicants respectfully traverse the rejection.

Without acquiescing the merits of the rejection, claim 1 has been amended to incorporate the subject matter of claim 4, which has not been included in this rejection. Therefore, it is respectfully submitted that the claimed composition of claim 1 is not disclosed, taught or suggested by the cited references and patentable over the cited art. In addition, each of claims 3, 5-12, 14-17 and 22 depend directly or indirectly from claim 1, and thus these claims are patentable over the cited art for at least the same reasons.

Accordingly, withdrawal of the rejection is respectfully requested.

**VI. Response to Rejection of Claims 1-3 and 5-22 under 35 U.S.C. § 103(a)**

Claims 1-3 and 5-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanbayashi in view of Taneda et al., Pat. No. 5,248,637 (1993) ("Taneda").

Without acquiescing the merits of the rejection, claim 1 has been amended to incorporate the subject matter of claim 4, which has not been included in this rejection. Therefore, it is respectfully submitted that the claimed composition of claim 1 is not disclosed, taught or suggested by the cited references and patentable over the cited art. In addition, each of claims 3, 5-12, and 14-22 depend directly or indirectly from claim 1, and thus these claims are patentable over the cited art for at least the same reasons.

Accordingly, withdrawal of the rejection is respectfully requested.

**VII. Response to Rejection of Claim 21 under 35 U.S.C. § 103(a)**

Claim 21 is rejected under 35 U.S.C. 103(a) as obvious over Sanbayashi in view of Taneda.

Applicants respectfully traverse the rejection. Claim 21 depends from claim 18, which depends from claim 1, and thus it is respectfully submitted that claim 21 is patentable for at least the same reasons as claim 1.

Accordingly, withdrawal of the rejection is respectfully requested.

**VIII. Response to Rejection of Claims 23-24 under 35 U.S.C. § 103(a)**

Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanbayashi in view of Koichi, further in view of Hayakawa et al., EP 0816466 (provided within applicant's IDS) ("Hayakawa").

Applicants respectfully traverse the rejection. Claims 23-24 depend from claim 1, and thus it is respectfully submitted that these claims are patentable for at least the same reasons as claim 1.

Accordingly, withdrawal of the rejection is respectfully requested.

**IX. Rejection of Claims 23-24 under 35 U.S.C. § 103(a)**

Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanbayashi in view of Taneda, further in view of Hayakawa et al., EP 0816466 (provided within applicant's IDS) ("Hayakawa").

Applicants respectfully traverse the rejection. Claims 23-24 depend from claim 1, and thus it is respectfully submitted that claims 23-24 are patentable for at least the same reasons as claim 1.

Accordingly, withdrawal of the rejection is respectfully requested.

**XI. Conclusion**

In view of the above, reconsideration and allowance of claims 1, 3, 5-12, and 14-24 is respectfully requested.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Keiko K. Takagi  
Registration No. 47,121

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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